

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT:

(A) NAME: De Staat der Nederlanden

(B) STREET: P.O. box 1

(C) CITY: Bilthoven

(D) STATE: Utrecht

(E) COUNTRY: The Netherlands

(F) POSTAL CODE (ZIP): 3720 BA

(ii) TITLE OF INVENTION: Novel mutants of gramnegative mucosal bacteria and application thereof in vaccines.

(iii) NUMBER OF SEQUENCES: 4

(iv) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 27 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: E. coli

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

15

ACTGACGCGT GTGATTGATA AATCCGC

27

(3) INFORMATION FOR SEQ ID NO: 2:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 30 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10

(ii) MOLECULE TYPE: cDNA

(vi) ORIGINAL SOURCE:

(A) ORGANISM: E. coli

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

GTAGGGCGGC ACGTCCTGCG CCACACCGGA

30

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(4) INFORMATION FOR SEQ ID NO: 3:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 30 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

25

(ii) MOLECULE TYPE: cDNA

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(vi) ORIGINAL SOURCE:

(A) ORGANISM: N. meningitidis

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

TCCGGTGTGG CGCAGGACGT GCCGCCCTAC

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(5) INFORMATION FOR SEQ ID NO: 4:

09466073 032100

16

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 25 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

5

(ii) MOLECULE TYPE: cDNA

(vi) ORIGINAL SOURCE:

- (A) ORGANISM: *N. meningitidis*

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

15

CGGCCGCTCT AGAACTAGTG GATCA

25

0012220" 22092460